Web date: 06/28/2007



PRE-APPLICATIONS: BSD Review Discipline Descriptions

For alternate formats, call 206-296-6600.

Best to print on legal (8 1/2 x 14") paper.

BSD – Pre-Application Review Discipline Descriptions

Building Services Division (BSD) Pre-Application meetings for building permits can involve a wide range of review disciplines in order to provide a prospective applicant with useful information as they prepare a building permit application for the final intake appointment. The text below outlines each review discipline that may apply during a BSD pre-application meeting:

Building Code Issues

Building plan review includes, but is not limited to, review of allowable building areas, allowed types of construction, the separation of different occupancy groups, required protection of exterior walls, and egress/access throughout the building. Primarily, this review pertains to life safety issues. Also, the overall accessibility of the facility (within the building) is reviewed for compliance to the building code and American National Standards Institute (ANSI) A117.1 standards. Additionally, the review may consider state energy code amendments and other state and county codes. The applicable building code for most projects is the 2006 International Building Code, but some residential units may need to be built to the 2006 International Residential Code for One- and Two-family Dwellings. The thoroughness of building plan review at the pre-application meeting is, in part, based on the quality of the drawings submitted. The more plans are fully developed, the more detailed the review comments can be during the pre-application meeting. Typically, structural design is not considered during pre-application meetings, except when site conditions may dictate, or when unusual structural systems are proposed. However, structural design criteria may be a pertinent topic.

Fire Flow & Access Issues

Fire Flow & Access review at pre-application meetings covers compliance with Title 17 of the King County Code (KCC). The applicable fire code is the 2006 International Fire Code. Review issues include the International Fire Code, fire flow and the associated Certificate of Water Availability, fire lane requirements and layout, monitored fire alarm systems, sprinkler systems, fire hydrant/FDC (fire department connection) locations, and Fire Department access (fire fighters & their apparatus and ladder rescue access for multi-story residential buildings).

Drainage Issues

Drainage or Site Engineering review ensures that the proposed design will meet the requirements of the 2005 King County Surface Water Design Manual (KCSWDM), 2007 King County Road Standards (KCRS) and pertinent site engineering issues. This review includes research on special requirements applicable to the proposed development, discussion of proposals and technical engineering comments, examination of alternative design (if necessary), and procedural direction on difficult site constraints. These reviews include flow control requirements, drainage detention requirements, conveyance and downstream analysis requirements, water quality treatment issues, full or targeted drainage review requirements, closed depression thresholds, and Technical Information Report (TIR) requirements. DDES staff coordinates with other review staff to achieve consistency with other code requirements, and to develop solutions to potential conflicting issues.

Zoning/Landscape/Parking Issues

Commercial site plan review involves: ensuring that a proposal complies with zoning code [Title 21A of King County Code (KCC)] requirements, site handicap accessibility standards, coordination with related land use permits (Shoreline Substantial Development Permits, SEPA, Rezones, Variances, etc.), and landscape inspection activities. Review focuses on all aspects of site development, excluding structures and drainage. Common examples of review subjects include: parking and access (number of required regular, compact and barrier free stalls, aisle numbers and widths, surface type and placement); bicycle and pedestrian circulation [number of storage racks or lockers, walkway surfacing slope and widths, placement on-site, connections off-site, handicap accessible routes of travel (ART) and ramps]; landscape buffers (between differing uses or zones, in parking areas and along street frontages, sight distance triangles, landscape performance and maintenance bonds and water budgets); trash and recyclable storage areas; structural setbacks and height limits; permitted uses; recreation space; and outdoor site lighting.

Traffic Issues

Traffic review covers compliance with the 2007 King County Road Standards (KCRS) for traffic safety, King County road frontage requirements including driveway widths and locations, sight distance issues, roadway widening, and sidewalk locations. DDES staff coordinates with other King County Department of Transportation (KCDOT) disciplines to determine the requirements within King County right-of-way for the following: Traffic Impact Analysis (TIA), signal and illumination improvements, changes to channelization, the need for guard rail, and structural review for retaining walls.

Geotechnical Issues

Geotechnical review covers evaluation of plans, site conditions, available maps, geotechnical engineering reports and other site information for compliance with current building, zoning and environmental codes. Review generally addresses the issues of topography and surrounding development, indications of slope instability, shallow groundwater, and artificial landfill. Review of the plans includes evaluation of civil plans, structural plans and plan notes. The primary focus is on foundation design, retaining walls, rockeries, subsurface drainage and final grades. If a geotechnical report is required, detailed review will include evaluation of the exploration and sampling methods, review of the scope and results of both quantitative and qualitative analysis, and verification that required mitigation measures have been implemented in the final plans. In some cases, detailed review includes evaluation of contaminated soil conditions, the use of soil amendments, groundwater conditions, and wetland hydrology, usually in coordination with staff from other review disciplines.

Wetland/Stream Issues

Wetland/Stream review evaluates proposed development sites for the presence of critical areas (e.g., wetlands and streams) and sensitive fish and wildlife species and habitats. Critical area regulations are subject to the provisions of King County Code (KCC) 21A.24 (Critical Areas Code). This code protects property owners, the general public and the environment from damage resulting from improper development of environmentally sensitive property. Sensitive wildlife habitats and species are protected in accordance with the State Environmental Protection Act (SEPA). King County's Comprehensive Plan has substantive authority under the SEPA rules. Comprehensive Policy E-168 identifies that King County shall designate and protect, through measures such as regulation, Wildlife Habitat Conservation Areas found in both the rural and urban portions of King County. If Critical Areas are found on a proposed development site, then the extent and classification of Critical Areas are determined and appropriate buffers and building setback boundary lines (BSBL) are applied. Critical area review also includes evaluating stormwater facilities to ensure that hydrologic contributions to Critical Areas are maintained and that appropriate mitigation is established.

Grading Issues

Grading review covers compliance with King County Code (KCC) 16.82 (Grading Code). Review examines general site issues, proposed grading plans, applicability of a Temporary Erosion & Sedimentation Control (TESC) plan, and import and export of site materials. Requirements for other permits such as demolition, Washington Department of Fish & Wildlife (WDFW), Washington Department of Ecology (DOE), and Forest Practice Application (FPA) are also examined.

Field Check

Prior to the pre-application meeting, a DDES site investigator prepares a Field Report which is used to inform the permit applicant and King County staff about the site-specific design and environmental constraints applicable to a proposed building project. This report consists of maps, historical information, relevant code citations, photos of existing conditions, and site and surrounding property descriptions. The information is used by planners, engineers, fire engineers, plans examiners, traffic engineers, wetlands biologists, earth scientists, and health officials. The findings in the Field Report are the foundation for many project review stations. By investigating the site prior to formal project submittal, the applicant is spared the cost of preparing a submittal package which may be impractical in light of the site conditions. Preparing the Field Report prior to the pre-application meeting informs King County staff about the specifics of the proposed site in advance, and thus the applicant receives accurate information about the implications of county codes for their particular project. A copy of the Field Report is provided to the applicant at the pre-application meeting for use by the applicant and consultants.

Green Building/Low Impact Development

King County's GreenTools program provides assistance and guidance to green building and low impact development projects. Applicants receive free technical assistance with integrating resource efficient, sustainable development strategies into their projects. Applicants may also be eligible for incentives and permitting assistance with green projects that meet specific criteria.

SEPA Issues

SEPA (State Environmental Policy Act) review examines whether the project is subject to SEPA pursuant to WAC (Washington Administrative Code) 197-11, Chapter 43.21 RCW (Revised Code of Washington) and King County Code (KCC) 20.44. WAC 197-11 contains a list of the environmental conditions that must be addressed in order to arrive at a determination, e.g., DNS (Determination of Non-Significance), MDNS (Mitigated Determination of Non-Significance, or a DS (Determination of Significance). The environmental checklist will be examined to determine if there are errors, misstatements, or omissions. The applicant will be directed to either correct the information or provide additional information in a revised environmental checklist at application submittal. The DDES Geographic Information System (GIS) is checked to determine if other review disciplines will need to provide comments such as geotechnical, wetlands, wildlife, etc. Existing codes and regulations are checked to ensure that any potential significant adverse impact resulting from the proposal can be addressed. If these existing codes and regulations cannot address impacts, then the applicant is advised that additional mitigations may be required under SEPA. Review is coordinated with the traffic engineer at King County Department of Transportation (KCDOT) to see if there is something unique to the area [congested intersections, high accident location (HAL) intersections, etc.] that would result in a significant adverse effect on traffic. Finally, the SEPA review process is explained to the applicant and appropriate timelines for processing are discussed.

Floodway/Floodplain Issues

Floodway/Floodplain review evaluates a proposed building site ensuring that construction occurs on the area where there is the least impact from a flood. The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRMs) which show many of the Floodway/Floodplains in King County. Every water body, whether a small creek, wetland or a major river or lake, has a Floodway/Floodplain associated with it. However, these waterways may or may not be currently mapped. The relationship of the Floodway/Floodplain to the proposed building site is determined by the elevation of the property, its relationship to the floodplain elevation, and the distance from the water body. The proposed development of properties located within Flood Hazard Areas is reviewed for compliance to the Flood Hazard Code requirements. The majority of these regulations are contained within the King County Surface Water Design Manual (KCSWDM) and the Flood Hazard Code provisions found in King County Code 21A.24.230 through 21A.24.270. Federal and State of Washington code regulations also impact proposed development in Floodway/Floodplains.

Fire Engineering Issues

Fire Engineering review covers compliance with Title 17 of the King County Code (KCC). The applicable fire code is the *2006 International Fire Code*. Review issues include complex fire/life safety issues typically regulated by the International Fire Code, National Fire Protection Association (NFPA) Standards, and other nationally recognized codes or standards. Building proposals or occupancies, which potentially create a hazardous or life safety scenario, require a separate fire engineering review. Typical types of occupancies falling into this type of review include designated "H" occupancies, structures or uses which utilize hazardous materials or processes, places of assemblies where 50 or more occupants could be present, college or trade school with laboratories, shops or research facilities; buildings which utilize high piled storage of materials or equipment, highrise buildings, locations where flammable or combustible materials, fluids, gasses, processes are stored, utilized or manufactured, and buildings or processes which utilize toxic and/or health related chemicals. Buildings and/or processes which require specialized detailed review because of the potential danger not normally associated with the normal construction or utilization of the structure receive fire engineering review. Fire engineering review does not substitute or replace any other required review, but rather compliments the total permit review.

Other Issues

Pre-application meetings <u>may</u> cover additional issues and review disciplines as deemed appropriate for the proposed type of pre-application meeting requested. These additional disciplines may include Land Use Issues such as Conditional Use Permits, Variances, Shorelines, Rezones, Subdivision, etc. Any request to include other issues during a BSD pre-application meeting should be discussed in advance at the time of meeting setup.

Check out the DDES Web site at www.kingcounty.gov/permits